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ABSTRACT

This ERIC digest looks at how college faculty can use cooperative learning principles to ensure that students actively create their own knowledge and work together to achieve shared learning goals. The first section describes cooperative learning and recommends training professors to apply an overall system to build cooperative activities, lessons, and strategies. The following section discusses concrete ways in which to implement cooperative learning organized around three approaches: (1) formal learning groups which last for various lengths of time to complete a specific task or assignment; (2) informal learning groups which are temporary, ad hoc groups which last for only one discussion or one class period; and (3) base groups which are long-term, heterogeneous cooperative learning groups with stable membership whose primary responsibility is to provide each student the support, encouragement, and assistance needed to progress academically. A final section mentions that over 600 studies have supported the efficacy of cooperative learning and emphasizes the role that faculty play in creating the experience. Three references are included. (JB)

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Cooperative Learning: Increasing College Faculty Instructional Productivity

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The use of active learning strategies, such as cooperative learning, is growing at a remarkable rate. Professors are incorporating cooperative learning to increase students' achievement, create positive relationships among students, and promote students' healthy psychological adjustment to school. This monograph is about how college faculty can ensure that students actively create their knowledge rather than passively listening to the professor's. It is about structuring learning situations cooperatively at the college level so that students work together to achieve shared goals.

What Is Cooperative Learning?

Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. Considerable research demonstrates that cooperative learning produces higher achievement, more positive relationships among students, and healthier psychological adjustment than do competitive or individualistic experiences. These effects, however, do not automatically appear when students are placed in groups. For cooperative learning to occur, the professor must carefully structure learning groups. Further, cooperative learning can be structured in many different ways. Three broad categories of cooperative learning strategies are formal cooperative learning groups, informal cooperative learning groups, and cooperative base groups. Finally, cooperation can be just as powerful among faculty as it is among students. To increase faculty members' effectiveness, the existing competitive/individualistic college structure must be restructured to a cooperative, team-based college structure.

The conceptual approach to cooperative learning described in this monograph involves training professors to apply an overall system to build cooperative activities, lessons, and strategies. This conceptual approach is based on a theoretical framework that provides general principles on how to structure cooperative learning activities in a teacher's specific subject area, curriculum, students, and setting. Using these principles, teachers can analyze their current curricula, students, and instructional goals, and design appropriate cooperative lessons. The advantage of conceptual principles is that they can be used in any classroom, from preschool to graduate school. The particulars can be adapted for differences in students' age, ability, and background. The appeal of a conceptual approach is that it provides a foundation upon which faculty can build. Rather than slavishly following a specific approach, faculty can branch out and try things on their own, using the procedures as models rather than as prescriptives.

Many educators who believe that they are using cooperative learning are, in fact, missing its essence. A crucial difference exists between simply putting students in groups to learn and in structuring cooperation among students. Cooperation is *not* having students sit side by side at the same table to talk with each other as they do their individual assignments. It is *not* assigning a report to a group of students where one student does all the work and the others put their names on the product as well. It is *not* having students do a task individually with instructions that the ones who finish first are to help the slower students. Cooperation is much more than being physically near other students, discussing material with them, helping them, or sharing material among students, although each is important in cooperative learning.

To be cooperative, a group must have clear positive interdependence, members must promote each other's learning and success face to face, hold each other personally and individually accountable to do his or her fair share of the work, use appropriately the interpersonal and small-group skills needed for cooperative efforts to be successful, and process as a group how effectively members are working together. These five essential components must be present for small-group learning to be truly cooperative.

What Are Some Ways to Implement Cooperative Learning?

Cooperative learning groups can be used to teach specific content and problem-solving skills (formal learning groups), ensure active cognitive processing during a lecture (informal learning groups), and provide long-term support and assistance for academic progress (base groups). When used in combination, these learning groups provide an overall structure with variety for students.

Formal cooperative learning groups might last for one class period to several weeks to complete a specific task or assignment. In a cooperative learning group, students work together to accomplish shared goals. They have two responsibilities: to maximize their own learning and to maximize the learning of all the members of the group. First, students receive instructions and objectives from their instructor. Second, the instructor assigns each student to a learning group, provides needed materials, arranges the room, and perhaps gives each student a specific role to fulfill in the group. Third, the instructor explains the task and the cooperative structure. Fourth, the instructor monitors the functioning of each learning group and intervenes to teach cooperative skills and assist in academic learning when needed. Finally, the instructor evaluates the quality and quantity of each student's learning

and ensures that each group processes how effectively members are working together. Students who need help in completing the assignment are instructed to ask their peers for assistance first and to request help from the instructor only if needed. Students are expected to interact with members of their group, share ideas and materials, support and encourage each other's academic achievement, orally explain and elaborate the concepts and strategies being learned, and hold each other accountable for completing the assignment, using a criterion-referenced evaluation.

Informal cooperative learning groups are temporary, ad hoc groups that last for only one discussion or one class period. Their purposes are to focus students' attention on the material to be learned, set a mood conducive to learning, help organize in advance the material to be covered in a class session, ensure that students cognitively process the material being taught, and provide closure to an instructional session. They can be used at any time but are especially useful during a lecture or direct teaching before the students' eyes begin to glaze over (some estimate the length of time that people can attend to a lecture to be about 12 to 15 minutes; students then need to process what they are learning or their minds drift away). During direct teaching, the instructional challenge for the teacher is to ensure that students do the intellectual work of organizing material, explaining it, summarizing it, and integrating it into existing conceptual networks, which can be achieved by having students do the advance organizing, cognitively process what they are learning, and summarize their learning. Breaking up lectures with short cooperative processing times gives the instructor slightly less lecture time but enhances what is learned and builds relationships among students. It helps counter what is proclaimed as the main problem of lectures: The information passes from the notes of the professor to the notes of the student without passing through the mind of either one.

Base groups are long-term, heterogeneous cooperative learning groups with stable membership whose primary responsibility is to provide each student the support, encouragement, and assistance needed to progress academically. Base groups personalize the work required and the learning experiences in the course. They consist of three or four participants who stay together during the entire course, perhaps exchanging phone numbers and information about schedules so they can meet outside class.

Why Bother Using Cooperative Learning?

Over 600 studies have been conducted during the past 90 years comparing the effectiveness of cooperative, competitive, and individualistic efforts. These studies have been conducted by a wide variety of researchers in different decades with subjects of different ages, in different subject areas, and in different settings. More is known about the efficacy of cooperative learning than about lecturing, departmentalization, the use of instructional technology, or almost any other aspect of education. The more one works in cooperative learning groups, the more that person learns, the better he understands what he is learning, the easier it is to remember what he learns, and the better he feels about himself, the class, and his classmates.

Cooperative learning, although not the easiest way to teach, can revitalize students and faculty by providing a structured environment for sharing some of the responsibility for learning. Through working together to learn complex conceptual information and master knowledge and skills, students learn more, have more fun, and develop many other skills, such as learning how to work with one another. Faculty, meanwhile, must provide the foundation and learning structures to guide their students in this new learning experience.

Selected References

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